## High School Geometry Grade Standards, Supporting Skills, and Examples

# Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.

### **Core HS Standards**

- 9-12.G.1.1. (Application) Apply the properties of triangles and quadrilaterals to find unknown parts.
- 9-12.G.1.2. (Application) Identify and apply relationships among triangles.

### **Advanced HS Standards**

- 9-12.G.1.1A. (Evaluation) Justify properties of geometric figures.
- 9-12.G.1.2A. (Application) Determine the values of the sine, cosine, and tangent ratios of right triangles.
- 9-12.G.1.3A. (Application) Apply properties associated with circles.
- 9-12.G.1.4A. (Analysis) Use formulas for surface area and volume to solve problems involving three-dimensional figures.

# Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

### **Core HS Standards**

- 9-12.G.2.1. (Analysis) Recognize the relationship between a three-dimensional figure and its two-dimensional representation.
- 9-12.G.2.2. (Application) Reflect across vertical or horizontal lines, and translate two-dimensional figures.
- 9-12.G.2.3. (Application) Use proportions to solve problems.

#### **Advanced HS Standards**

9-12.G.2.1A. (Synthesis) Use Cartesian coordinates to verify geometric properties.